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## (54) FILTERING METHOD AND FILTER DEVICE

(57) Abstract:

PURPOSE: To efficiently peel the layer of matter to be filtered deposited on the surface of a separation membrane by supplying a predetermined amt. of air to mix the same with a raw soln. to form air bubble streams along the separation membrane.

CONSTITUTION: In a filter device 3, a plurality of plate-shaped membranes 4 are vertically arranged so as to be spaced apart from each other and the suction pipe 6 connected to a pump 5 is connected to the upper end parts of the membranes 4 and a first air diffusion pipes 7 are arranged under the membranes 4 while a second air diffusion pipe 8 is provided on the lateral side of the lower ends of the membranes 4. The first air diffusion pipe 7 forms air bubble streams along the surfaces of the membranes 4 and the second air diffusion pipe 8 applies vibration and an impact to the membranes 4 to peel the layer of matter to be filtered on the surfaces of the membranes 4. In order to form the air bubble streams, the amt. V1 of air supplied to the lower parts of the separation membranes 4 is set to 0.5